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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,674	10/25/2006	Stefan Haaks	2003P14790WOUS	5072
22116	7590	03/29/2011	EXAMINER	
SIEMENS CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 170 WOOD AVENUE SOUTH ISELIN, NJ 08830			DESTA, ELIAS	
		ART UNIT	PAPER NUMBER	
		2857		
		MAIL DATE		DELIVERY MODE
		03/29/2011		PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/573,674	HAAKS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	ELIAS DESTA	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 2/16/2011.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 19-22, 25-30, 32-34, 36 and 37 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 19-22,25-30,32-34,36 and 37 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_.

## **Detailed Action**

### **Response to Amendment**

1. Applicant's remark, see amendment, filed 2/16/2011, with respect to the rejection of the appealed claims 19-38 as being anticipated by Okazaki et al. (U.S PAP 2003/0154051, hereon Okazaki) is reconsidered; however, the amendment presented in the Request Continued Examination does not make the instant claims distinct from Okazaki as noted below. Examiner acknowledges the cancellation of claims 1-18, 23-24, 31, 35 and 38 by the applicant. Claims 19-22, 25-30, 32-34, 36 and 37 are now pending. No other issue remains.

### **Explanation of rejection**

#### Claim rejection – 35 U.S.C. 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 19, 20 and 25 are directed to non-statutory subject matter. The respective claims include insufficient recitation of a machine or transformation. The concept of having a database in claim 19 for instance is merely nominal; information stored on a paper may qualify for a database. The remaining steps can be carried out by human mind and analyzed using a pencil and paper. Naturally, pencil and paper are considered an extension of human thought process; therefore, based upon consideration of all the

relevant factors with respect to the instant claims as a whole the claims are held to claim an abstract idea, and are therefore rejected under 35 U.S.C 101.

Claim rejection – 35 U.S.C. 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 19-22, 25-30, 32-34, 36 and 37 are rejected under 35 U.S.C. 102(e) as anticipated by Okazaki et al. (U.S. Patent 6,909,990, hereon Okazaki).

In reference to claim 19: Okazaki teaches a method for causes of disruptive factors in a plant (or installation) under investigation (see Okazaki, Fig. 4 and column 1, lines 6-12). The method comprises:

- Gathering relevant causation data performance limits for plurality of related systems or plants (installations) [see Okazaki, Fig. 7, plant data collecting (unit 8), and column 5, line 62 to column 6, line 6];
- Assigning the relevant causation data to plant elements (see Okazaki, Fig. 6, unit 55) wherein the data in the database contains data about plant elements occurring the plant under investigation, and the questionnaire contains questions for plant elements occurring with in the plant

(installation) under investigation (see Okazaki, column 8, line 36 to column 9, line 20);

- Assigning the causation data to target groups of the plant (installation) (see Okazaki, column 10, lines 20-55);
- Generating a questionnaire from the causation data wherein the questionnaire only contains questions relating to the plants under investigation (see Okazaki, Fig. 5, section 47 and column 8, lines 27-67);
  - Wherein the questionnaire only contains questions for installation elements occurring within the installation (see Okazaki, Fig. 4), and
  - Wherein questionnaire is generated such that the questionnaire only contains questions for employees in the target group (the expert in charge) to be questioned, the installation under investigation containing details about the target groups to be questioned (see Okazaki, column 17, lines 20-38)
- Collecting responses to the questionnaire questions from employees of the plant under investigation (see Okazaki, Fig. 5, section 47, answers and column 8, lines 27-67, multiple choice type answers);
- Analyzing the employee responses to the questionnaire (see Okazaki, Fig. 5, section 49, diagnostic results and column 9, lines 27-59); and
- Determining the cause of disruptive factors of the plant based on the questionnaire analysis (see Okazaki, Fig. 6, section 55 and column 9, line 60 to column 10, line 19) wherein the data about the installation under

investigation is requested beforehand (see Okazaki, Fig. 4 and column 8, lines 28-36) by an operator of the installation and stored in the second database (see Okazaki, Fig. 7, computer 3).

Okazaki teaches a system having at least two computer systems related to the user's system (5), which consist of the diagnosis process and a plant data collecting and processing computer (2) (see Fig. 7, systems 2 and 5). The arrangement provides a first database (computer 8 necessarily includes a database to manage data collected from individual sensors to the plant machinery (6)] and a second database in the diagnosis computer (3) which is composed of a single or plurality of computers in charge of different functions, such as transmission, diagnosis and data storage for plural locations or plants (see Okazaki, column 6, lines 45-62). The questionnaire consists of questions related to the installation under investigation (see Okazaki, column 8, lines 27-67).

In reference to claim 32: A device for determining the causes of disruptive factors in an installation (see Okazaki, Abstract, Fig. 4, and column 1, lines 1-12), comprising:

- A first database that contains data about causes of malfunctions (diagnosis process) in a plurality of installations and improvement measure data (see Okazaki, Fig. 7, computers 2 and 5, where the computers necessarily include a database);
- A second database that contains data specific to the installation under investigation wherein the data in the second database contains details about the installation elements in the installation under investigation (see Okazaki, column 6, lines 45-62);

- An output mechanism to output a questionnaire (see Okazaki, Fig. 4, includes a remark input section);
- An input mechanism to input responses of employees working in the installation to the questions in the questionnaire and to input the data about the installation under investigation (see Okazaki, Fig. 4 necessarily includes an input mechanism for the particular user to input data into the system, and see also Fig. 5); and
- A data processing unit (see Okazaki, Fig. 1, unit 13) to generate the questionnaire from the data (primary diagnosis, unit 35) in the first database and the second database and to determine the causes of disruptive factors of the installation under investigation (secondary diagnosis) by analyzing the responses of the employees to the questions in the questionnaire wherein:
  - Causation data is assigned to target groups of the installation and installation elements (see Okazaki, Fig. 1, diagnosis computer 30, mail or transmit causation data etc...),
  - Data about the installation to be assessed contains data about the target groups to be questioned (see Okazaki, Figs. 3 and 4, includes user input),
  - The questionnaire being generated such that it contains questions for employees in the target groups to be questioned (see Okazaki, Fig. 4, includes for the employee to input remark),

- wherein the questionnaire only contains questions for installation elements occurring within the installation (see Okazaki, Fig. 4),
- wherein the questionnaire only contains questions for employees in the target groups (the expert in charge) to be questioned, and
- Wherein the data about the installation under investigation is requested beforehand by an operator of the installation and stored in the second database (see Okazaki, column 17, lines 20-38, see also the discussion in claim 1 above with respect to first and second database).

With regard to claims 20 and 33: Okazaki further teaches that the disruptive factors are selected from the group consisting of malfunctions and performance limits (see Okazaki, Fig. 6, data related to abnormal vibration of the turbine).

With regard to claim 22: Okazaki further teaches that the improvement measure data is stored in a database (see Okazaki, Fig. 5, section 47).

With regard to claim 21: Okazaki further teaches that the method includes generating the questionnaire by a data processing unit (see Okazaki, Fig. 1, Diagnosis sub-system or unit 13) that uses data in the first and second databases (see Fig. 1, system 12 and system 13), outputting the questionnaire by an output unit (see Okazaki, Fig. 4), collecting the employee responses via an input unit (a computer system with input keyboard and monitor for facilitating input) (see Fig. 1, unit 20), storing the

employee responses in the second database (the computers in these configurations include database or memory to store the data collected), and determining the causes of malfunctions and performance limits by the data processing unit based on the stored responses of the employees (see Okazaki, Fig. 5, Diagnosis results, factors and evaluation).

With regard to claim 25: Okazaki further teaches that the questionnaire is directed to drive components of the plant (installation) (see Okazaki, column 10, lines 60-62, e.g., rotor, coupling etc...).

With regard to claim 26: Okazaki further teaches that the responses of the employees are collected via interviews (see Okazaki, column 5, lines 52-61 and column 8, line 35 to column 9, line 20).

With regard to claim 27: Okazaki further teaches that the response of the employees' are collected via a data network (see Okazaki, Fig. 1).

With regard to claims 28 and 34: Okazaki further teaches that the relevant causation data is obtained from malfunction reports of plants (or installation) (see Okazaki, Figs. 4 and 5).

With regard to claim 29: Okazaki further teaches that a service provider implements the technical service (see Okazaki, column 5, lines 52-61).

With regard to claim 30: Okazaki further teaches that the assessment of the technical state of the installation is made based on the responses of the employees and with defined assessment rules (see Okazaki, column 12, line 50 to column 13, line 27).

With regard to claim 36: Okazaki further teaches that the data communication network connects the output unit and the input unit, which is accessible by the employees (see Okazaki, Fig. 7).

With regard to claim 37: Okazaki further teaches that the database is connected to the plurality of plants via a data network (see Okazaki, Fig. 6 and 7, a sample of page for plant number xx is used as an example).

With regard to claim 38: Okazaki further teaches that the questionnaire generated contains questions for the employees in the target groups to be questioned (see Okazaki, Fig. 2, steps 2 and 3).

### **Response to Argument**

6. Unlike the applicant's argument (see amendment filed on 02/16/2011, pages 2-3), the added limitation into claims 19 and 32 do not distinguish the instant claims over Okazaki. As noted above, in reference to claims 19 and 32, Okazaki teaches assigning the relevant causation data to plant elements (see Okazaki, Fig. 6, unit 55) wherein the data in the database contains data about plant elements occurring the plant under investigation, and the questionnaire contains questions for plant elements occurring with in the plant (installation) under investigation (see Okazaki, column 8, line 36 to column 9, line 20); assigning the causation data to target groups of the plant (installation) (see Okazaki, column 10, lines 20-55).

Further, the questionnaire only contains questions for installation elements occurring within the installation (see Okazaki, Fig. 4), and questionnaire is generated

such that the questionnaire only contains questions for employees in the target group (the expert in charge) to be questioned, the installation under investigation containing details about the target groups to be questioned (see Okazaki, column 17, lines 20-38)

Determining the causes of disruptive factors of the installation is based on the questionnaire analysis (see Okazaki, Fig. 5), further the data about the installation under investigation is requested "beforehand" by an operator of the installation and stored in the second database because in Okazaki, Fig. 4 shows check items or the primary diagnosis is prepared in advance for each piece of machinery of the diagnosis object plant so as to include check items (see Okazaki, column 8, lines 28-36)

Applicant's arguments filed 2/16/2011 have been fully considered but they are not persuasive for the reasons noted above.

## **Conclusion**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELIAS DESTA whose telephone number is (571)272-2214. The examiner can normally be reached on M-Fri (10:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on (571)-272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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